

Mrs. Hayden

NAME _____

Piecewise Functions

$$1. f(x) = \begin{cases} x+1 & \text{if } 0 \leq x < 5 \\ 2x-4 & \text{if } 5 \leq x < 10 \end{cases}$$

Domain:

Range:

$$2. f(x) = \begin{cases} 4x & \text{if } 0 \leq x < 2 \\ -2x+10 & \text{if } 2 \leq x < 5 \\ 2 & \text{if } 5 \leq x < 10 \end{cases}$$

$$3. k(x) = \begin{cases} 2x+3 & \text{if } x < 4 \\ x-1 & \text{if } 4 \leq x \leq 9 \end{cases}$$

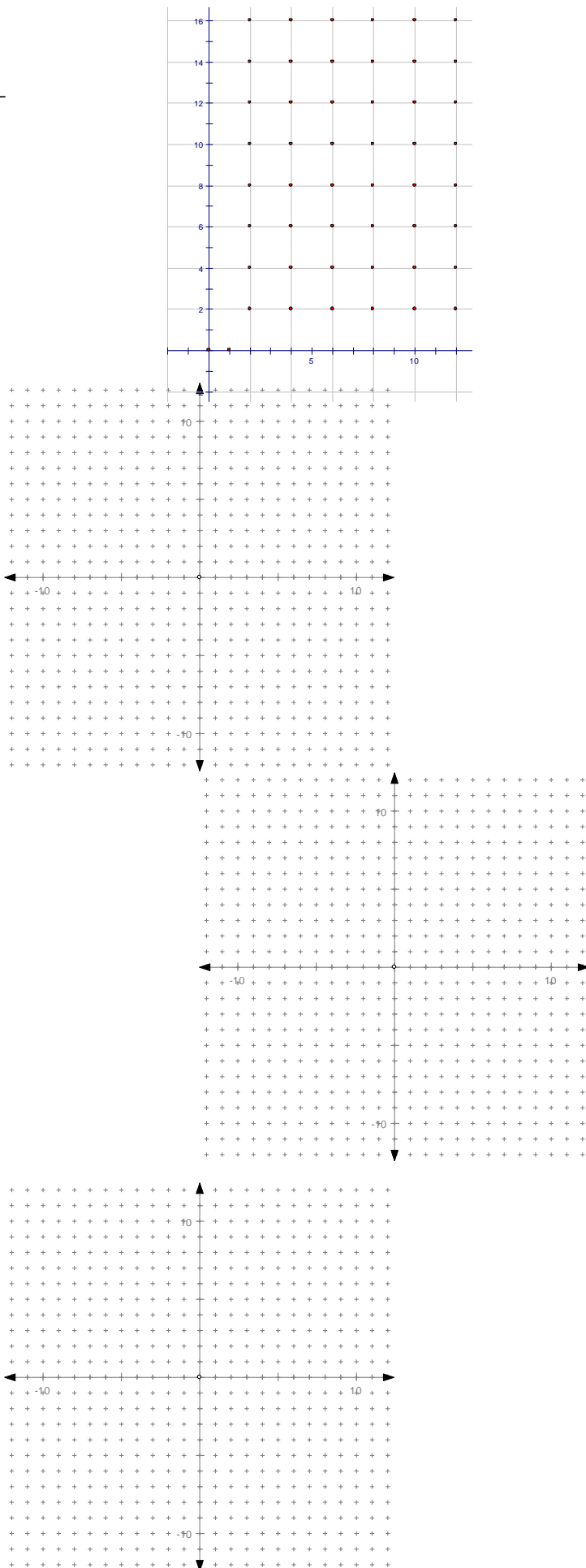
Domain:

Range:

$$4. b(x) = \begin{cases} 2 & \text{if } x < 1 \\ 2x & \text{if } 1 \leq x \leq 3 \\ 7 - \frac{1}{3}x & \text{if } x > 3 \end{cases}$$

Domain:

Range:



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$$5. h(x) = \begin{cases} -2 & \text{if } x < 0 \\ x+1 & \text{if } 0 \leq x \leq 10 \\ -\frac{1}{2}x+16 & \text{if } x > 10 \end{cases}$$

Domain:

Range:

$$6. f(x) = \begin{cases} -5-x & \text{if } x < 2 \\ x-1 & \text{if } 2 \leq x \leq 10 \end{cases}$$

Domain:

Range:

$$7. f(x) = \begin{cases} 3x+5 & \text{if } -1 \leq x < 2 \\ -x+9 & \text{if } 2 \leq x < 5 \end{cases}$$

Domain:

Range:

$$8. g(x) = \begin{cases} [x] & \text{if } -3 < x < 2 \\ x & \text{if } x \leq -3 \\ -x+3 & \text{if } x \geq 2 \end{cases}$$

Domain:

Range:

